PMH10

ECONOMIC ANALYSIS OF RISPERIDONE LONG-ACTING INJECTION IN NEW ZEALAND

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OBJECTIVES: The New Zealand (NZ) government drug purchasing agency PHARMAC assesses products being considered for reimbursement using criteria which include clinical need, cost-effectiveness and drug budget impact and availability. All major new pharmaceutical investments are evaluated by PHARMAC using cost-utility analysis. The objective of this study was to conduct a cost-utility analysis to examine the cost-effectiveness of risperidone long-acting injection in the treatment of non-compliant schizophrenia patients from a NZ health care system perspective, using methodology that would be acceptable to PHARMAC. **METHODS:** A 1-year, decision tree, cost-utility model was developed to compare risperidone long-acting injection with a mixed comparator (conventional depot antipsychotics, oral risperidone and oral olanzapine) in patients with a history of relapse due to medication non-compliance. The event probabilities (medication adherence, relapse, movement disorders [extrapyramidal symptoms] and survival) were obtained from comprehensive literature reviews. Local costs were obtained from the Pharmaceutical Schedule and the New Zealand Health Information Service (NZHIS). Utilities were modeled based on existing literature. Development of the model also involved a consultative process with PHARMAC staff. The analyses were performed versus the mixed comparator as well as each individual treatment option. Uncertainty was explored using sensitivity analyses. **RESULTS:** Risperidone long-acting injection was dominant compared with the mixed comparator, oral risperidone and oral olanzapine. Compared with conventional depots alone, the Incremental Cost Utility Ratio (ICUR) was NZ$47,711. **CONCLUSIONS:** Risperidone long-acting injection was considered a cost-effective treatment option in New Zealand using PHARMAC's acceptability threshold for ICUR of less than NZ$20,000. Although the treatment was considered to have acceptable cost-effectiveness, funding is contingent upon budget being available in an environment in which pharmaceutical spending has been static over the last 10 years.

PMH11

PROBABILISTIC COST-EFFECTIVENESS ANALYSIS OF ESCITALOPRAM VERSUS CITALOPRAM IN THE TREATMENT OF SEVERE DEPRESSION IN THE UNITED KINGDOM

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OBJECTIVES: To determine the cost-effectiveness of escitalopram compared with citalopram in the management of severe depression (Montgomery-Åsberg Depression Rating Scale [MADRS] total score greater or less than 30) in the UK. **METHODS:** A decision analytic model with a 6-month time horizon was adapted from Hemels et al. (2004). The model incorporated treatment paths and direct resource use (psychiatric hospitalisations, medications, GP and psychiatrist visits, treatment discontinuation and attempted suicide) associated with the treatment of severe depression and indirect costs due to work absenteeism. Main outcomes were clinical success (remission [MADRS ≤ 12] at 6 months) and cost (2003 GBP) of treatment. The analysis was performed from both a societal and National Health Service (NHS) perspectives. Clinical data were derived from a meta-analysis of 8-week head-to-head randomised clinical trials and extrapolated to 6 months. Costs were derived from standard UK price lists and literature. Societal costs of lost productivity were calculated using the Human Capital approach. **RESULTS:** At 6 months after start of treatment, the overall clinical success remission rate was higher for escitalopram (53.7%) than for citalopram (48.7%). From the NHS perspective, the total expected cost per successfully treated patient was £146 (18.5%) lower for escitalopram (£786) compared with citalopram (£931). From the societal perspective, the total expected cost per successfully treated severely depressed patient was £238 (18.6%) lower for escitalopram (£1283) than for citalopram (£1521). Multivariate sensitivity analyses demonstrated that in >99% of the cases, escitalopram was dominant for both perspectives at all ranges of probabilities tested. Sensitivity analyses demonstrated that the model was robust and that, for the societal perspective, escitalopram remained the dominant strategy, even if citalopram had an acquisition cost of £0. **CONCLUSIONS:** The results of this study suggest that escitalopram is a cost-effective antidepressant compared with citalopram in the management of severe depression in the UK.

PMH12

THE IMPACT OF PREMATURE DISCONTINUATION OF ANTIDEPRESSANT THERAPY IN MAJOR DEPRESSIVE DISORDER IN THE UK

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OBJECTIVES: Antidepressant therapy is highly effective in patients with major depressive disorder (MDD). Evidence has shown that most patients stay on pharmacotherapy for less than 6 months even though clinical guidelines recommend treatment for longer periods of time. The objective of this study was to assess the impact of premature discontinuation of antidepressant therapy on costs and outcomes in MDD patients. **METHODS:** We created a UK adaptation of a simulation model to compare the costs and outcomes associated with patients who respond to treatment with a selective serotonin reuptake inhibitor (SSRI) and discontinue treatment prematurely to those who respond to SSRI's and complete the recommended course of treatment. Patients are outpatients and are assumed to follow treatment as recommended by the clinical guidelines except when early discontinuation occurs. The model considers medication, primary care physician visit, specialist (i.e., psychiatrist, hospital days, suicide, etc.), and adverse event costs. Treatment efficacy was taken from published meta-analyses, and early discontinuation was estimated from the published literature. Resource use was estimated from the clinical guidelines and published literature. Unit costs were drawn from standard published sources and inflated to 2003 UK pounds. **RESULTS:** Over the course of 5 years, we observe that continuation patients (i.e. patients who complete a recommended course of treatment) have 743 fewer symptom days, 9 fewer disability days, and lower costs by $287 than discontinuation patients (i.e. patients who discontinue early) when having relapses/recurrences. In the index episode, continuation patients incur more costs than discontinuation patients due to increase usage of drugs and physician. However, patients who discontinue incur more costs later due to higher relapse/recurrence rates. **CONCLUSIONS:** By encouraging patients to complete a full course of drug therapy, patients will incur fewer costs and fewer symptom and disability days.